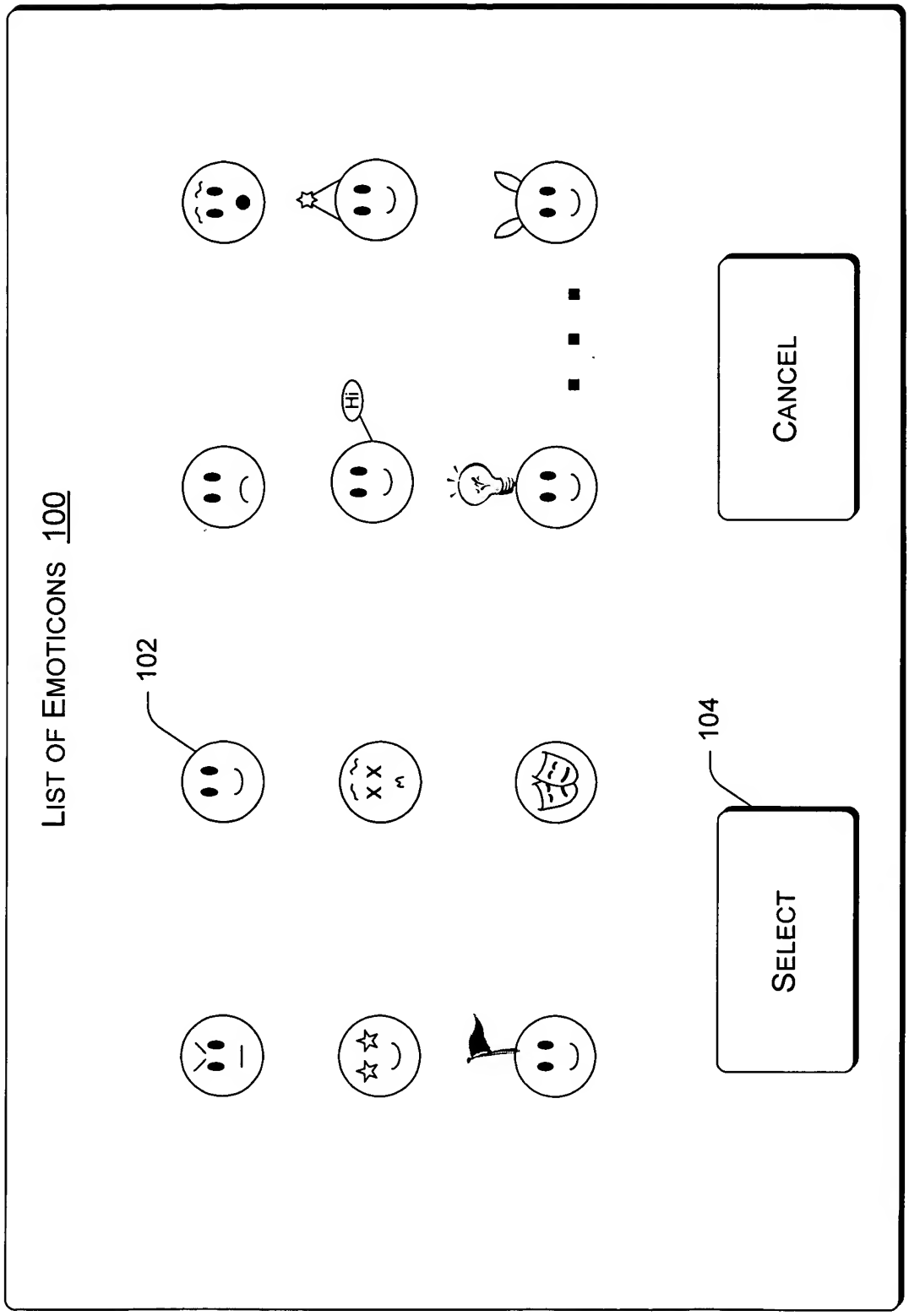


Fig. 1
(Prior Art)

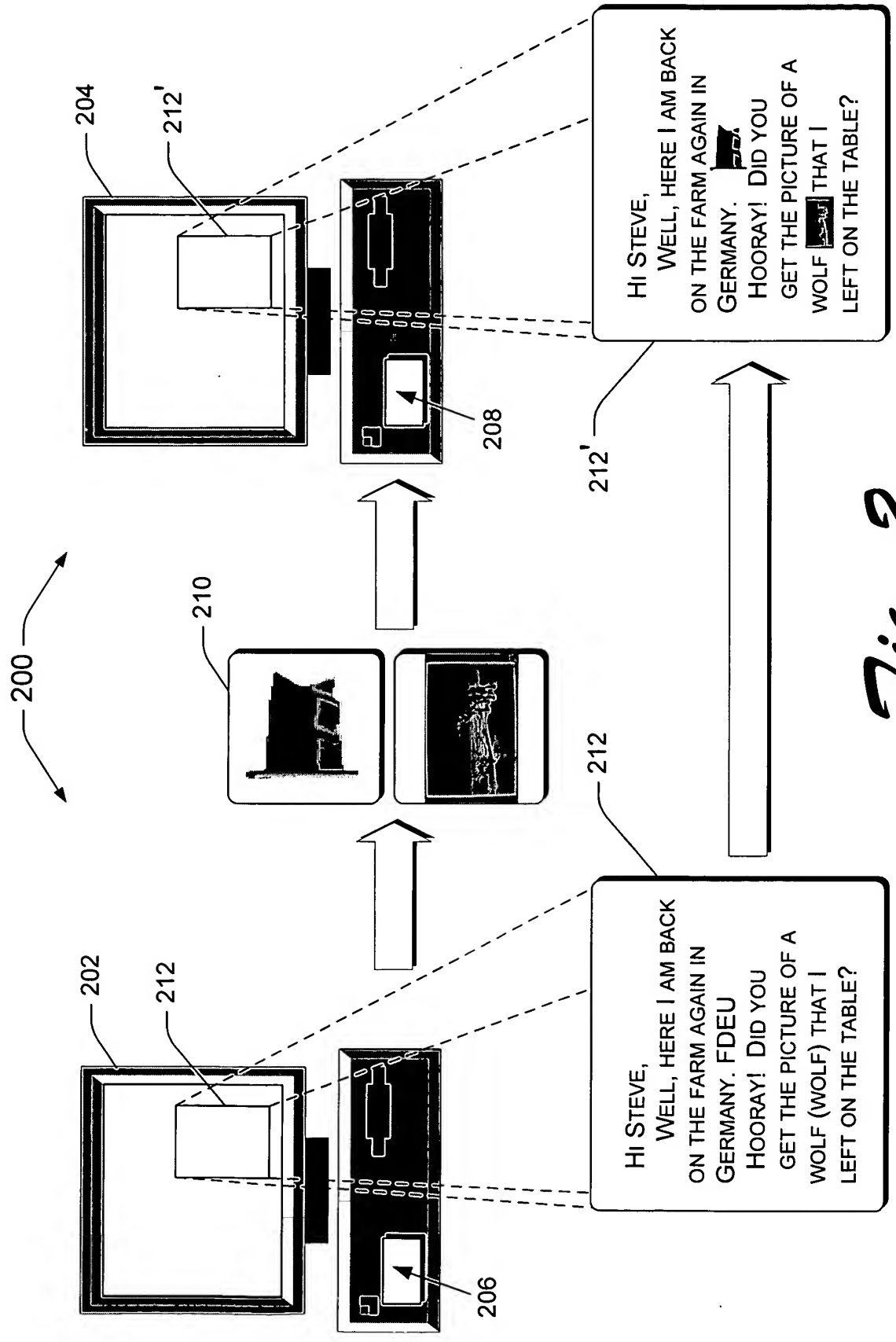
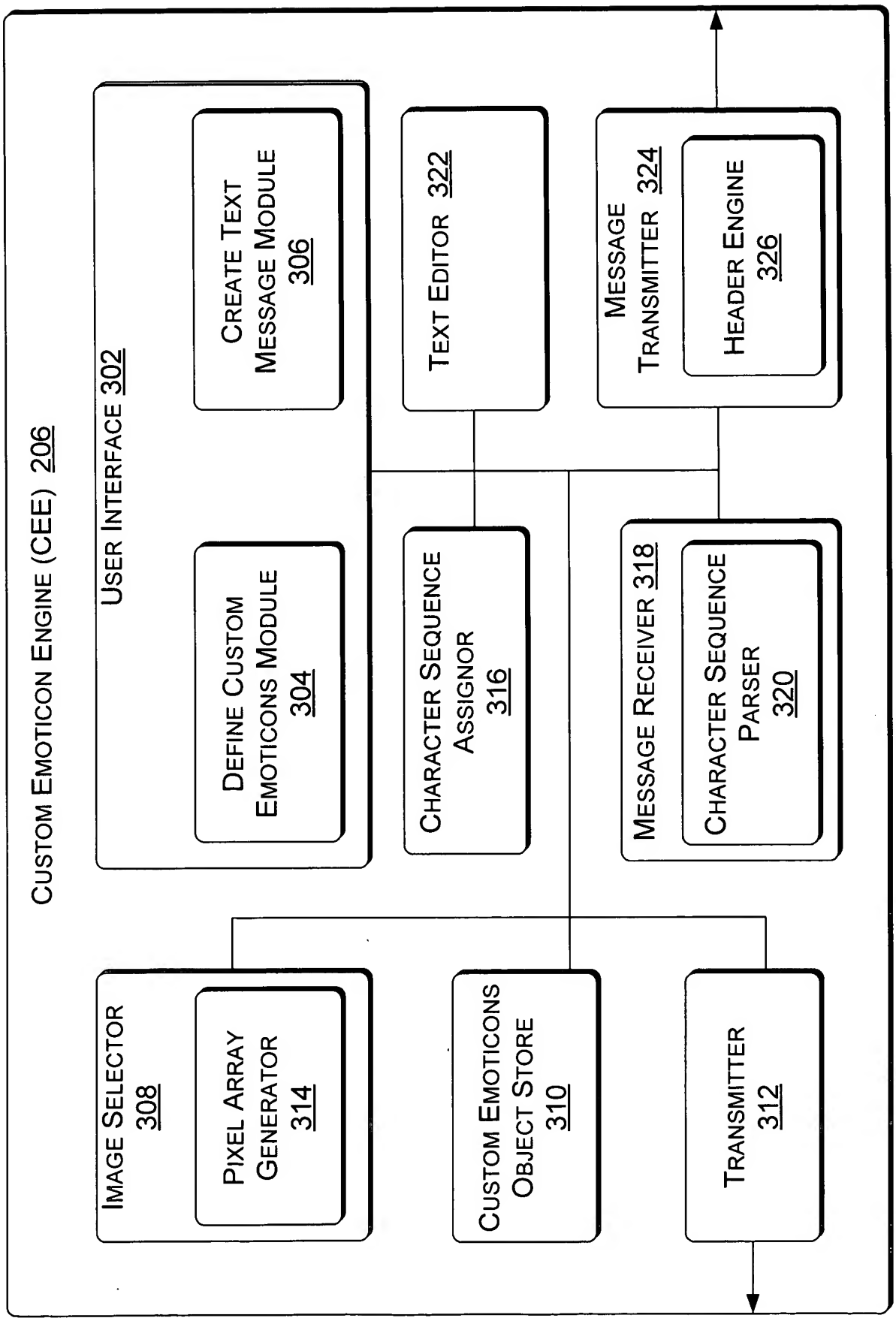

200
202
204
206
208
210
212
212'
212'
HI STEVE,
WELL, HERE I AM BACK ON THE FARM AGAIN IN GERMANY. FDEU
HOORAY! DID YOU GET THE PICTURE OF A WOLF (WOLF) THAT I LEFT ON THE TABLE?
HI STEVE,
WELL, HERE I AM BACK ON THE FARM AGAIN IN GERMANY.
HOORAY! DID YOU GET THE PICTURE OF A WOLF THAT I LEFT ON THE TABLE?

Fig. 2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USER INTERFACE 302
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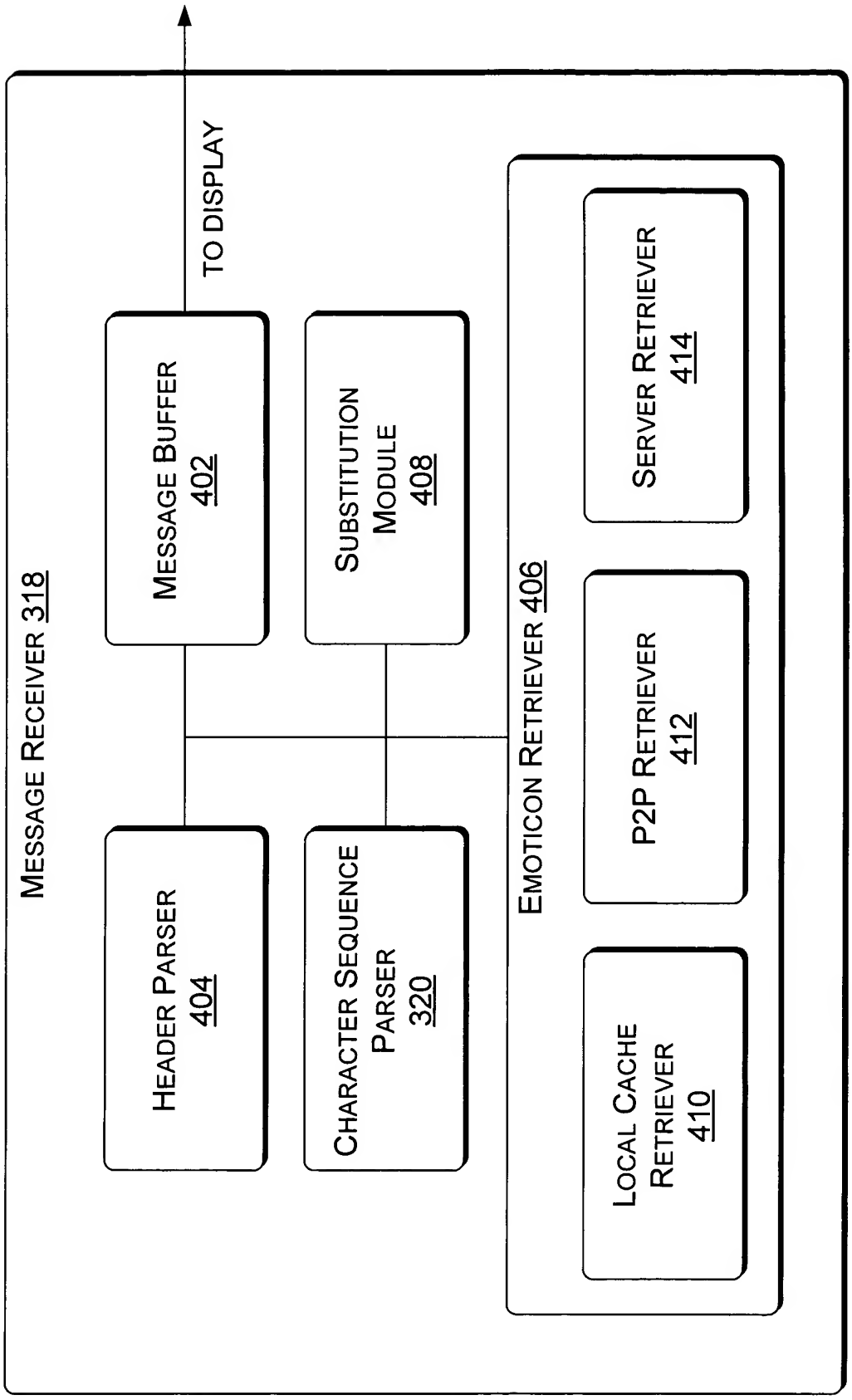
DEFINE CUSTOM EMOTICONS MODULE 304
TEXT EDITOR 322
MESSAGE TRANSMITTER 324
HEADER ENGINE 326
CHARACTER SEQUENCE ASSIGNOR 316
MESSAGE RECEIVER 318
CHARACTER SEQUENCE PARSER 320
IMAGE SELECTOR 308
PIXEL ARRAY GENERATOR 314
CUSTOM EMOTICONS OBJECT STORE 310
TRANSMITTER 312

Fig. 3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TO DISPLAY
MESSAGE BUFFER 402
SUBSTITUTION MODULE 408
HEADER PARSER 404
CHARACTER SEQUENCE PARSER 320
EMOTICON RETRIEVER 406
SERVER RETRIEVER 414
P2P RETRIEVER 412
LOCAL CACHE RETRIEVER 410

Fig. 4

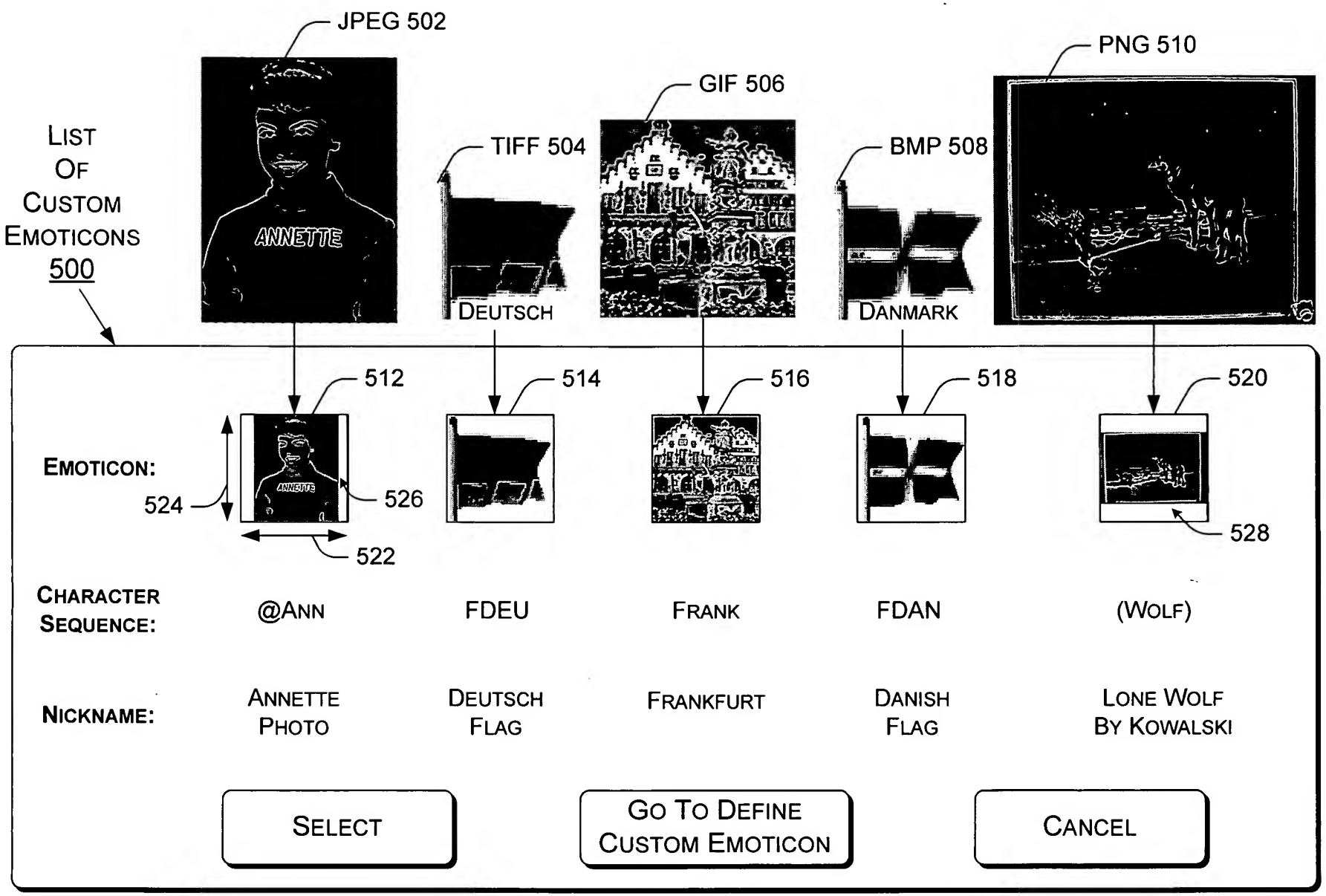

JPEG 502
TIFF 504
GIF 506
BMP 508
PNG 510
LIST OF CUSTOM EMOTICONS 500
ANNETTE
DEUTSCH
DANMARK
512
514
516
518
520
EMOTICON:
524
526
522
528
CHARACTER SEQUENCE:
@ANN
FDEU
FRANK
FDAN
(WOLF)
NICKNAME:
ANNETTE PHOTO
DEUTSCH FLAG
FRANKFURT
DANISH FLAG
LONE WOLF BY KOWALSKI
SELECT
GO TO DEFINE CUSTOM EMOTICON
CANCEL

Fig. 5

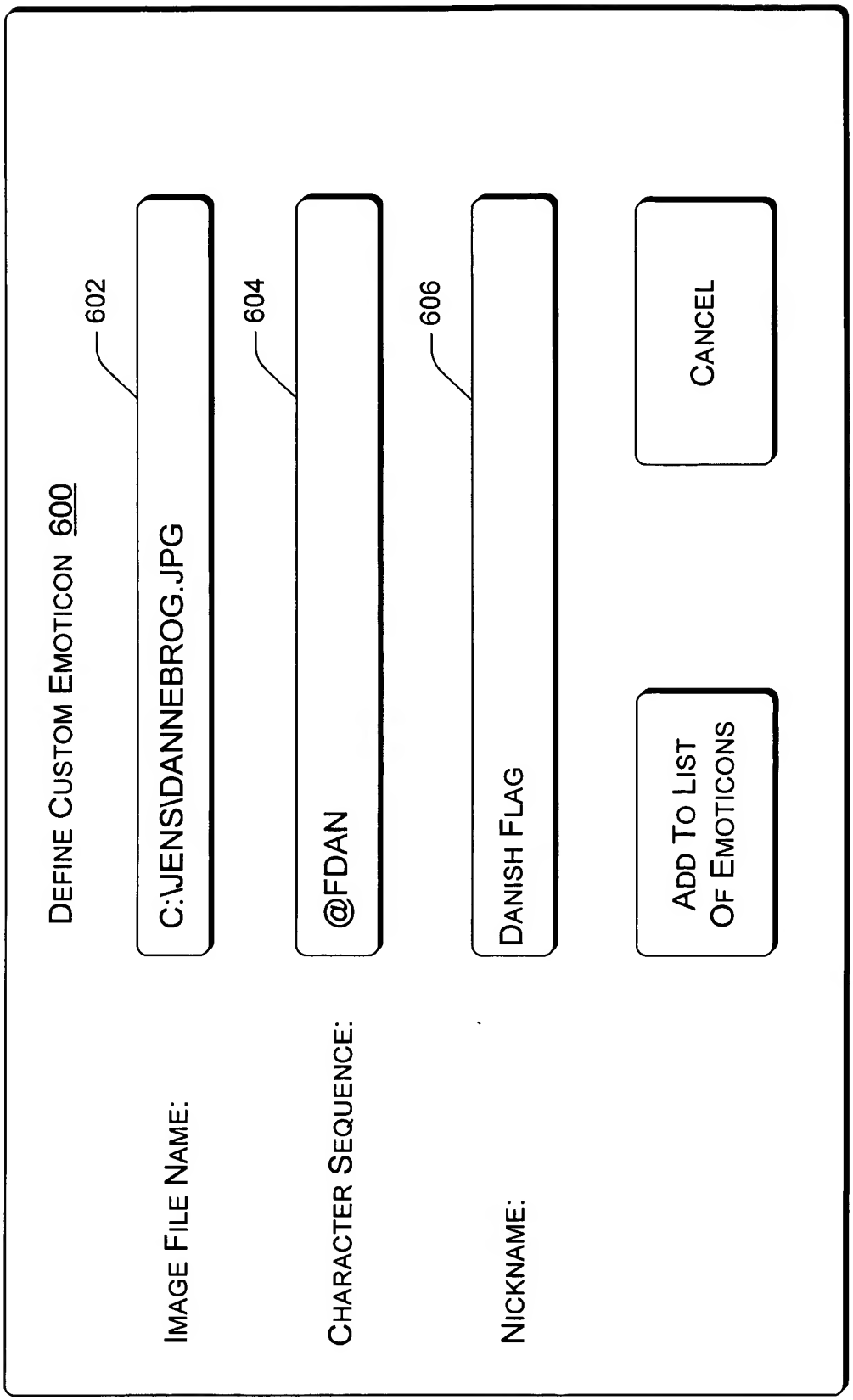

DEFINE CUSTOM EMOTICON 600
602
C:\JENS\DANNEBROG.JPG
IMAGE FILE NAME:
604
@FDAN
CHARACTER SEQUENCE:
606
DANISH FLAG
NICKNAME:
ADD TO LIST OF EMOTICONS
CANCEL

Fig. 6

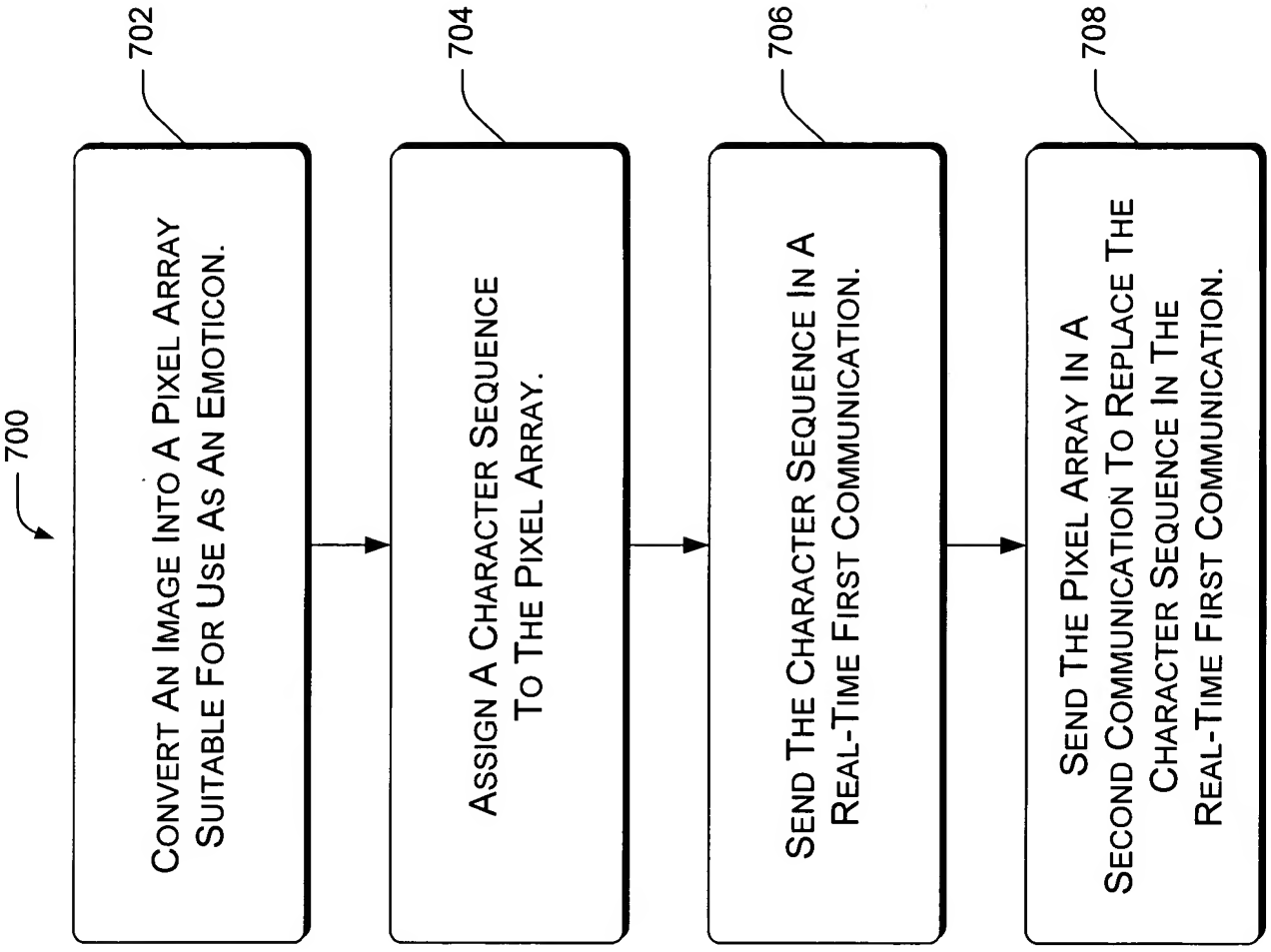

700
702
CONVERT AN IMAGE INTO A PIXEL ARRAY SUITABLE FOR USE AS AN EMOTICON.
704
ASSIGN A CHARACTER SEQUENCE TO THE PIXEL ARRAY.
706
SEND THE CHARACTER SEQUENCE IN A REAL-TIME FIRST COMMUNICATION.
708
SEND THE PIXEL ARRAY IN A SECOND COMMUNICATION TO REPLACE THE CHARACTER SEQUENCE IN THE REAL-TIME FIRST COMMUNICATION.

Fig. 7

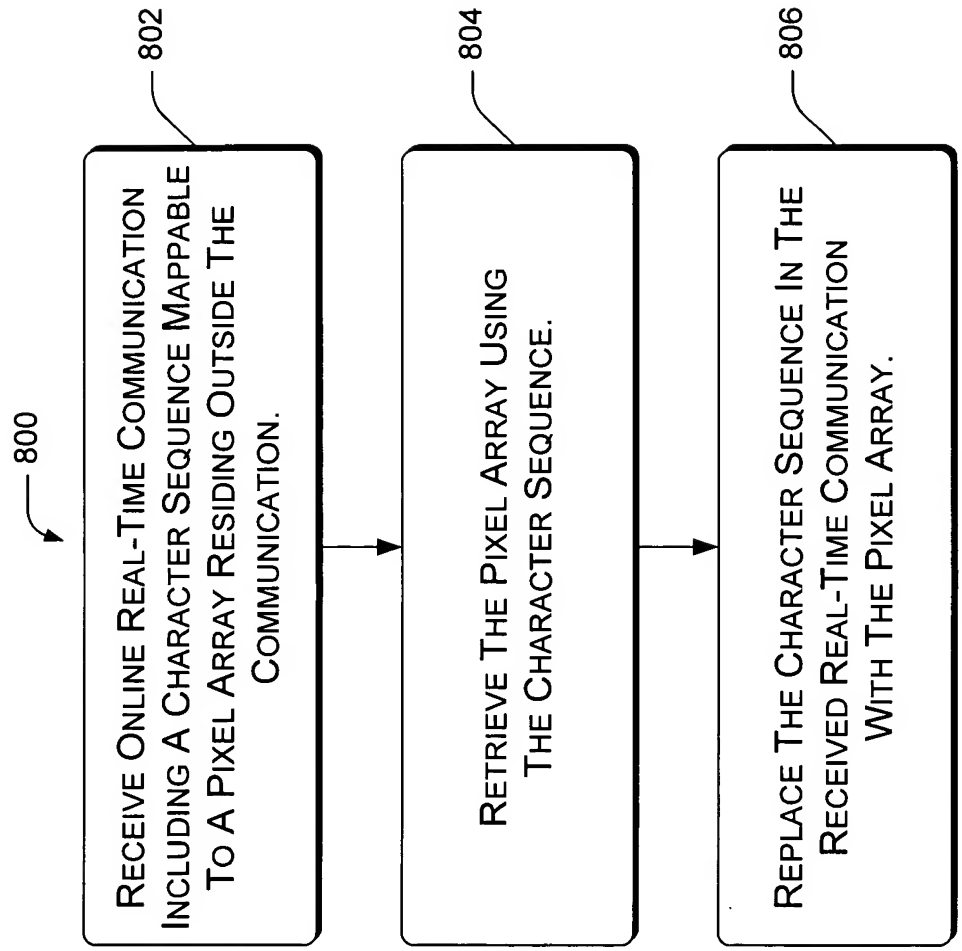
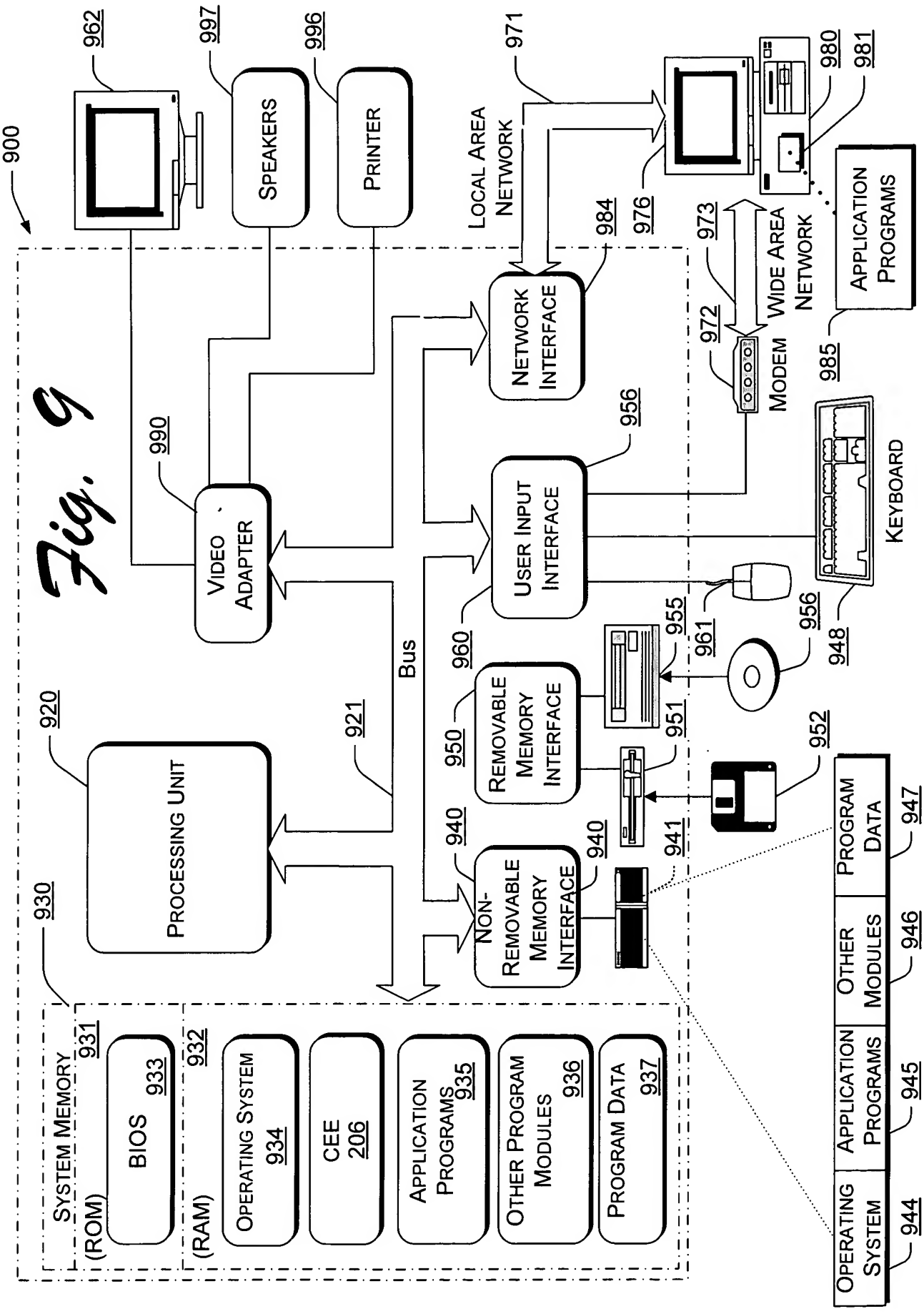

800
802
RECEIVE ONLINE REAL-TIME COMMUNICATION INCLUDING A CHARACTER SEQUENCE MAPPABLE TO A PIXEL ARRAY RESIDING OUTSIDE THE COMMUNICATION.
804
RETRIEVE THE PIXEL ARRAY USING THE CHARACTER SEQUENCE.
806
REPLACE THE CHARACTER SEQUENCE IN THE RECEIVED REAL-TIME COMMUNICATION WITH THE PIXEL ARRAY.

Fig. 8


900
962
997
996
971
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981
SPEAKERS
PRINTER
LOCAL AREA NETWORK
APPLICATION PROGRAMS
984
976
973
WIDE AREA NETWORK
NETWORK INTERFACE
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972
MODEM
985
956
VIDEO ADAPTER
USER INPUT INTERFACE
KEYBOARD
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961
955
956
948
920
921
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REMOVABLE MEMORY INTERFACE
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952
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940
941
PROCESSING UNIT
NON-REMOVABLE MEMORY INTERFACE
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930
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946
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931
(ROM)
BIOS
933
932
(RAM)
OPERATING SYSTEM
934
APPLICATION PROGRAMS
945
CEE
206
APPLICATION PROGRAMS
935
OTHER PROGRAM MODULES
936
PROGRAM DATA
937
OPERATING SYSTEM
944

Fig. 9